## What is Claimed is:

- 1. A method of defects recovery and status display of DRAM which mainly through a monitor program to regularly detect the operation status of information integrity stored in various memory page of DRAM, and to recover in real, wherein includes steps below:
  - a. predetermine a spare memory page as temporary storage space for a tested page data;
  - b. copy tested memory page data to pre-described spare memory page at the beginning of each test cycle;
  - c. build a TLB to map the location of the tested memory page to the predetermined spare memory page, the tested memory page is relocated to predetermined spare memory page through TLB, which redirect follow up access operations to the spare memory page;
  - d. if there is no error occurs, back-store spare memory page data to the tested memory page, return the tested page to normal access operation and continue next memory page testing;
  - e. if there is any error occurs, monitor program will constantly block the said tested memory page, and any access operation to the said memory page will be redirected to the predetermined spare memory page according to TLB
  - f. display the tested result through display device.
- 2. A method of defects recovery and status display of DRAM according to claim 1, wherein the said monitor program tests memory page is a page monitor program which inspects page by page.
- 3. A method of defects recovery and status display of DRAM according to claim 1, wherein the said testing cycle of monitor program is supplied by a counter.
- 4. A method of defects recovery and status display of DRAM according to claim 1, wherein the said display device is liquid crystal device (LCD), monitor, etc.
- 5. A method of defects recovery and status display of DRAM according to claim 1, wherein the said result displayed in step f includes: testing frequency, intact report, detected fault, sum of memory usage, and actual memory size, etc., which enables users real time master the employment status of DRAM.
- 6. A method of defects recovery and status display of DRAM according to claim 1, wherein the said content displayed in display device is keeping unchanged until the beginning of next testing cycle.
- 7. A method of defects recovery and status display of DRAM according to claim 1, wherein during the said step e, the tested memory page keeps in occupied state, until next memory page is tested, the monitor program will predetermine another spare memory page for tested memory page to keep on storing information, in the mean time, TLB will record memory page in which defects are discovered,

- and the corresponding relationship between next tested memory page and predetermined memory page.
- 8. A method of defects recovery and status display of DRAM according to claim 1, wherein the said memory page inspection further includes inspection method for which error correction code( ECC) is not included, mainly through normal hardware test, which operates the continuous operation of write, then read to memory page, testing if the access is normal, if failed, it implies that there is error happened in the said memory page.
- 9. A method of defects recovery and status display of DRAM according to claim 1, wherein the said memory page inspection further includes inspection method for which error correction code is included, which is proceeded with above described monitor program copying information to spare memory page in the same time, if there is single bit error happened, it will be recorded that the said memory page is unstable, and then recover it and strengthen the inspection; if single bit error happens again, then step e described in claim 1 will be executed to prevent single bit from transferring to binary error; if the error disappears, then step d described in claim 1 will be executed.